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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,797	07/26/2002	Achim Gopferich	02592	1932
7590 06/25/2008				
KENTON R. MULLINS STOUT, UXA, BUYAN & MULLINS, LLP 4 VENTURE SUITE 300 IRVINE, CA 92618				
EXAMINER				
SILVERMAN, ERIC E				
ART UNIT		PAPER NUMBER		
1618				
MAIL DATE		DELIVERY MODE		
06/25/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/019,797

**Applicant(s)**

GOPFERICH ET AL.

**Examiner**

Eric E. Silverman, PhD

**Art Unit**

1618

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 9-59 is/are pending in the application.
- 4a) Of the above claim(s) 12,13,16-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,14,15 and 33-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Applicants' response, filed 3/31/2008, has been received. Claims 1 – 6, 9 – 59 are pending. Claims 12, 13, and 16 – 32 are withdrawn.

#### ***Claim Rejections - 35 USC § 102***

Claims 1 – 6, 9 – 11, 14, 15 remain rejected, and new claims 33 – 59 are now rejected, under 35 U.S.C. 102(b) as being anticipated by WO 95/03356 for reasons of record and those discussed below.

*1. The amendments to claims 1, 2, and 3.*

Claim 1as amended now requires that the hydrophilic polymer have at least one reactive group having a first functional end and second functional end, and that the first functional group be bound to the hydrophobic polymer whereas the second be "for binding of a surface modifying substance" either directly or by way of another bifunctional molecule. Claims 2 and 3 further limit the nature of the hydrophilic polymer, with claim 3 requiring polyethyleneglycol amine. In Example 15 and Figure 2f, the WO reference teaches binding polyethyleneglycol amine to PLA via dicarboxylic acid (wherein the acid is converted to an amide by reaction with the PEG amine). The free hydroxyl group at the terminus of the polyethylenegyocol amine is suitable for binding to a surface modifying agent, as required by the claim.

*2. New claims 33 – 59.*

New claim 33 requires the hydrophobic polymer to be PLA with a molecular mass greater than 1,000 Da. The molecular mass requirement was discussed previously with respect to claim 10, and PLA is the disclosed hydrophobic polymer in Figure 2f. Claim

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34's limitation is met because any polymer is either linear, branched, or a combination thereof. Claims 35 – 39, 41, 43 are met by PLA in Figure 2f, and claim 36 is met because the hydroxyl end of the PEG amine could bind a surface-modifying molecule via directly or via another molecule, and claims 40, 42 and 44 are met because the free functional end group (hydroxyl) is different from the second functional end group (amine). Claim 45 is similar to claim 1, and is read on by Figure 2f and Example 15. Claim 46 is met by the abstract, which teaches binding the surface of particles made from the polymers (such as those in Figure 2f) to modifying substrates, Whereas claim 47 is met because Figure 2f discloses the polymer before being bound to any substrate. Claims 48 and 49, are similar to claims 2 and 3, as discussed above, and claims 50 – 52 are similar to claims 4 and 5. Claims 53 and 54 require a shaped body which may be a three-dimensional body or a particle. These claim limitations are met by the abstract's teaching to form nano- or micro-particles of the polymer. Claims 55-59 are similar to claims already discussed.

### 3. *Response to Applicants' arguments*

Applicants' arguments have been fully considered, but are not persuasive.

Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically

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pointing out how the language of the claims patentably distinguishes them from the references.

Specifically, Applicants' arguments merely allege that the claims as amended are not taught by the references, without pointing to what claim limitations are believed to be missing from the references. For reasons of record and those discussed above, the reference anticipates the claims.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 and 11 remain rejected under 35 U.S.C. 103(a) as being unpatentable over WO 95/03356 for reasons of record and those discussed below.

### ***Response to Arguments***

Applicants' arguments have been fully considered, but are not persuasive. Applicants allege that the claim is allowable by virtue of its depending on claim 1. Because claim 1 is not allowable, this argument is not persuasive.

Claim 11 remains rejected under 35 U.S.C. 103(a) as being unpatentable over WO 95/03356 in view of US 4,904,479 for reasons of record and those discussed below.

### ***Response to Arguments***

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Applicants' arguments have been fully considered, but are not persuasive.

Applicants allege that the claim is allowable by virtue of its depending on claim 1.

Because claim 1 is not allowable, this argument is not persuasive.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric E. Silverman, PhD whose telephone number is (571)272-5549. The examiner can normally be reached on Monday to Thursday 7:00 am to 5:00 pm and Friday 7:00 am to noon.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley can be reached on 571 272 0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael G. Hartley/  
Supervisory Patent Examiner, Art Unit 1618  
Eric E. Silverman, PhD  
Art Unit 1618

**Application Number****Application/Control No.**

10/019,797

**Applicant(s)/Patent under  
Reexamination**

GOPFERICH ET AL.

**Examiner**

Eric E. Silverman, PhD

**Art Unit**

1618